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10/762,303	01/23/2004	Gonzalo Gaston	200209835-1	4629

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EXAMINER

GOLDBERG, BRIAN J

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/762,303	Applicant(s) GASTON ET AL.	
	Examiner Brian Goldberg	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-26 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 7 and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The “scraper...is arranged to be moved in a reciprocating manner in a circumferential direction” in line 3 of claim 7 and “removal device is movable in reciprocating manner” in lines 1-2 of claim 19 are not disclosed in the specification. In one embodiment, the scraper moves radially in and out, with the drum undergoing small reciprocating rotary movements. In another embodiment, the blade moves radially inwards and moves along the bottom of the recessed area to scrape out the spittoon, but does not “moved in a reciprocating manner” as claimed.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 9-14, 16, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klausbruckner et al. in view of Steinfield et al.

3. Regarding claims 1-6, 9-14, Klausbruckner et al. disclose "a hardcopy device comprising a printhead (14 of Fig 1), a spittoon arranged to receive ink from said printhead (56 of Fig 5)...wherein said spittoon is movably mounted on said hardcopy device (col 4 ln 52-54)...wherein said spittoon is mounted on a rotatable drum (12 of Fig 6 and col 5 ln 3-5)...wherein said printhead (14 of Fig 1) is fixedly mounted on said hardcopy device adjacent to said drum (see Fig 2), and wherein a print media carrier (12, 16, 18 and col 2 ln 66 – col 3 ln 6) is provided on said drum...further comprising a scraper (54 of Fig 6) adjacent to said drum, said scraper being spaced from said printhead circumferentially around said drum (see Fig 1)...wherein said scraper is arranged to be moved radially relative to a circumferential surface of said drum (col 4 ln 61-65)...further comprising a controller, said controller controlling said printhead to eject ink into said spittoon (col 2 ln 59-65 and col 5 ln 24-27, ln 51-55)... a hardcopy device comprising means defining a print media path (12, 16, 18, 22 of Fig 2), printing means (14 of Fig 2) arranged to fire ink at a print media as it moves along said path, spittoon means for receiving waste ink from said printing means (56 of Fig 5), means for producing relative movement between said printing means and said spittoon means (62, 64, 66, 68 of Fig 6)...a service station module (52 of Fig 6) for a hardcopy device, said module comprising a spittoon (56 of Fig 5)...a method of operating a hardcopy device...comprising the steps of: producing relative movement of said printhead and said spittoon to bring them into a mutually adjacent position (col 5 ln 47-54); firing ink

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from said printhead into said spittoon (col 5 ln 54-55)." Thus Klausbruckner et al. meet the claimed invention except a heater arranged to heat ink, or means for heating ink, received in said spittoon wherein said heater comprises an electrical resistance element or an electrical heating element.

4. Steinfield et al. teach providing "a heater arranged to heat ink (260 of Fig 3, col 6 ln 41-43 and col 3 ln 62-66)," for the purpose of drying the ink, "wherein said heater comprises an electrical resistance element (col 6 ln 41-43)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a heater comprising an electrical heating element arranged to heat ink for the purpose of drying the ink. One would have been motivated to so modify the spittoon of Klausbruckner et al. for the benefit of drying the ink to fix the ink to the spittoon to prevent spilling or splashing of the ink.

5. Regarding claim 16, Klausbruckner et al. in view of Steinfield et al. disclose the claimed invention as set forth above with respect to claim 14 as well as a controller as set forth above with respect to claim 10. With the use of a controller, it is inherent that a computer program on a computer readable medium for performing the method would be run on a processing device associated with a suitable hardcopy device.

6. Regarding claim 23, Klausbruckner et al. in view of Steinfield et al. disclose the claimed invention as set forth above with respect to claim 4. Klausbruckner further disclose "a scraper attached to a chassis (col 5 ln 32-36) and spaced circumferentially around said drum away from said print head (see Fig 1)." The scraper is part of the service station, which could be mounted on the device chassis as stated.

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7. Regarding claims 24 and 25, Klausbruckner et al. in view of Steinfield et al. disclose the claimed invention as set forth above with respect to claim 3 in which Steinfield et al. teach providing a heater to heat ink as a drying means. Further, *In re Japikse*, 181 F.2d 1019, 1023, 86 USPQ 70, 73 (CCPA 1950) discloses that shifting location of parts (in this case, the heater) is considered within the level of ordinary skill in the art, and thus obvious.
8. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klausbruckner et al. in view of Steinfield et al. as applied to claims 6 and 14 above, and further in view of Gaylor et al.
9. Regarding claim 7, Klausbruckner et al. disclose "wherein said drum has a width (see 12 of Fig 1) and wherein said scraper...is arranged to be moved in a reciprocating manner in a circumferential direction and parallel to the circumferential surface of said drum (col 5 ln 55-58)." The scraper can move in a circumferential direction as the drum rotates and in a reciprocating manner parallel to the circumferential surface along channel 60. Thus the claimed invention is met except "wherein said scraper extends along substantially the entire width of said drum."
10. Gaylor et al. teach "wherein said scraper extends along substantially the entire width of said drum (120 of Fig 3)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a scraper that extends along the entire width of the drum. One would have been motivated to so modify the scraper of Klausbruckner et al. for the benefit of increasing the area that the scraper can scrape in one motion to improve its efficiency.

11. Regarding claim 15, Klausbruckner et al. disclose "providing relative movement of said printhead and said spittoon to bring them into non-adjacent positions (col 5 In 27-29)." Thus the claimed invention is met except "removing the contents of said spittoon."

12. Gaylor et al. teach "removing the contents of said spittoon (120 of Fig 3 and col 8 In 23-24)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to remove the contents of the spittoon. One would have been motivated to so modify Klausbruckner et al. for the benefit of limiting the amount of ink that builds up in the spittoon by clearing the spittoon of ink to allow for more spitting of ink when necessary.

13. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klausbruckner et al. in view of Steinfield et al. as applied to claim 3 above, and further in view of Phillips et al. Klausbruckner et al. and Steinfield et al. disclose the claimed invention as set forth above with respect to claim 3. Thus the claimed invention is met except "wherein said printhead is movably mounted on said hardcopy device and wherein said hardcopy device includes a print media path, wherein said printhead is moveable between a first, printing, disposition in which it is positioned adjacent to said print media path and a second, servicing disposition, in which it is positioned adjacent said drum."

14. Phillips et al. teach "wherein said printhead is movably mounted on said hardcopy device (Fig 4) and wherein said hardcopy device includes a print media path (40 of Fig 1), wherein said printhead is moveable between a first, printing, disposition in

which it is positioned adjacent to said print media path and a second, servicing disposition, in which it is positioned adjacent said drum (Fig 4 and col 6 ln 19-23).” It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a movably mounted printhead as described and a print media path. One would have been motivated to so modify the Klausbruckner et al. and Steinfield et al. combination for the benefit of “maintaining a printhead assembly within a relatively tight space,” as stated by Phillips et al. in column 2, lines 20-21.

15. Claims 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaylor et al. in view of Klausbruckner et al.

16. Regarding claim 17, Gaylor et al. disclose “a hardcopy device comprising a rotatable drum (90 of Fig 3) having a circumferential surface (area around 95 of Fig 3)...and said circumferential surface having a width (see width of 90 of Fig 3), an elongated spittoon region extending across substantially the entirety of said width of the circumferential surface of said drum (area around 95 of Fig 3), and a removal device for removing any contents of said spittoon region (120 of Fig 3), said removal device being movable radially relative to said drum (col 8 ln 59-61).” The removable device 120 is moving radially relative to the drum 90. This Gaylor et al. meet the claimed invention except “a print media carrier region being provided on said circumferential surface.”

17. Klausbruckner et al. teach “a print media carrier region being provided on said circumferential surface (see region on circumferential surface of 12 touching print media 22 in Fig 2).” It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a print media carrier on the circumferential surface.

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One would have been motivated to so modify Gaylor et al. with Klausbruckner et al. for the benefit of moving the print media in a more efficient manner for ink delivery, reducing print time.

18. Regarding claim 18 and 19, Gaylor et al. in view of Klausbruckner et al. disclose the claimed invention as set forth above with respect to claim 17. Thus the claimed invention is met except "wherein said removal device is movable in a circumferential direction and parallel relative to the circumferential surface of said drum" and "wherein said removal device is movable in reciprocating manner parallel to the circumferential surface of said drum."

19. Klausbruckner et al. teach "wherein said removal device is movable parallel to the circumferential surface of said drum (col 5 ln 55-57)" and "wherein said removal device is movable in reciprocating manner parallel to the circumferential surface of said drum (col 5 ln 55-58)." The scraper can move in a circumferential direction as the drum rotates and in a reciprocating manner parallel to the circumferential surface along channel 60. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to allow the removal device to be movable in reciprocating manner parallel to the surface of the drum. One would have been motivated to so modify Gaylor et al. for the benefit of providing better removal of ink in the spittoon by scraping the spittoon with an increase in the force the scraper applies to the spittoon through movement of the scraper parallel to the surface of the drum.

20. Regarding claim 20, Gaylor et al. disclose "wherein said removal device (120 of Fig 3) extends substantially across the entirety of said width of the circumferential surface of said drum (90 of Fig 3)."

21. Regarding claim 21, Gaylor et al. disclose "wherein said removal device includes a scraper blade (blade of 120 of Fig 3)."

22. Regarding claim 22, Gaylor et al. disclose "a method of operating a hardcopy device...comprising the steps of firing ink from said printhead into said spittoon (col 7 In 14-17), rotating said drum platen to move said spittoon region adjacent to a removal device for removing ink from said spittoon region (col 8 In 41-43 and In 59-61), and moving said removal device radially relative to said drum platen (col 8 In 59-61)." The drum platen (90 of Fig 3) is rotated in the direction of arrow 97 of figure 3, moving the spittoon region (area around 95 of Fig 3) adjacent to scraper 120.

23. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gaylor et al. in view of Klausbruckner et al. as applied to claim 17 above, and further in view of Steinfield et al. Gaylor et al. in view of Klausbruckner et al. disclose the claimed invention as set forth above with respect to claim 17 and thus disclose the claimed invention except "further comprising a heater arranged to heat ink received in said spittoon region, the heater position below the spittoon region."

24. Steinfield et al. teach providing "a heater arranged to heat ink (260 of Fig 3, col 6 In 41-43 and col 3 In 62-66)," for the purpose of drying the ink. Further, *In re Japikse*, 181 F.2d 1019, 1023, 86 USPQ 70, 73 (CCPA 1950) discloses that shifting location of parts (in this case, the heater) is considered within the level of ordinary skill in the art,

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and thus obvious. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a heater arranged to heat ink for the purpose of drying the ink positioned below the spittoon region. One would have been motivated to so modify the spittoon of Klausbruckner et al. for the benefit of drying the ink to fix the ink to the spittoon to prevent spilling or splashing of the ink.

Response to Arguments

25. Applicant's arguments regarding claims 1-6, 9-14, and 16 have been fully considered but they are not persuasive.

26. Regarding claims 1, 12, and 14, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The heater taught by Steinfeld et al. is teaching providing a heater to heat ink for the purpose of drying the ink and this is the same purpose of the heater in the instant application. In response to applicant's argument that there is no motivation to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so

found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, only the heater of the printer of Steinfeld et al. is being combined with the printer of Klausbruckner et al., so no motivation is necessary to combine the printers, only to combine the heater with the printer.

27. Regarding claim 5, the scraper of Klausbruckner et al. is “spaced from said printhead” in that there is space between the printhead and the scraper and “circumferentially around said drum” in that there is a distance (or space) between the printhead and the scraper in a circumferential direction (see Fig. 1).

28. Applicant's arguments with respect to claims 7, 8, 15, 17-22 have been considered but are moot in view of the new ground(s) of rejection.

29. Regarding claim 22, in response to applicant's arguments, the recitation “a print media carrier region” has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). The recitation of “a print media carrier” in the preamble is not a part of and does not further define the method as claimed.

Conclusion

30. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goldberg whose telephone number is 571-272-2728. The examiner can normally be reached on Monday through Friday, 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJG



March 24, 2006

Thinh Nguyen
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